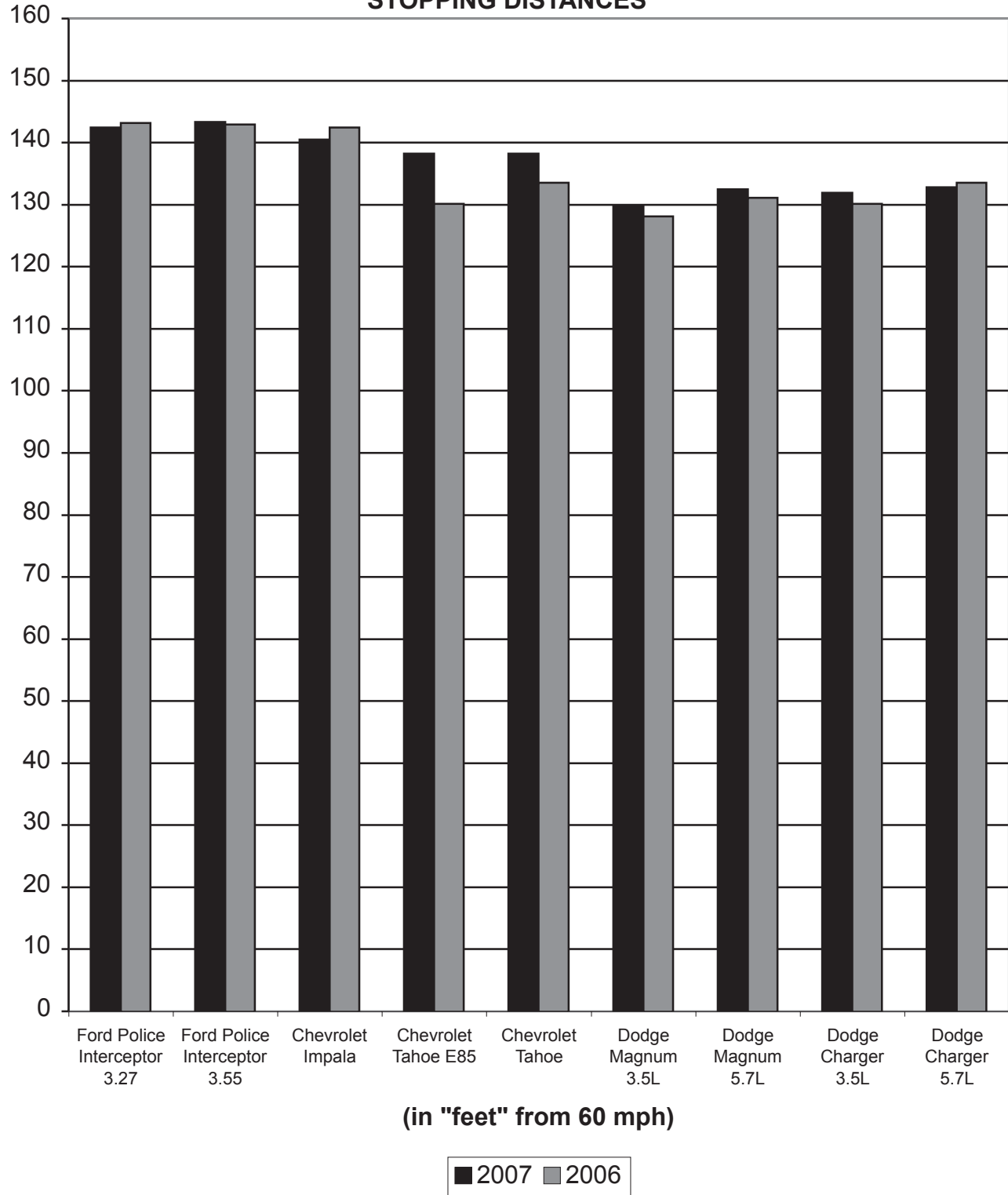


2006-07 BRAKE TESTING COMPARISON

STOPPING DISTANCES



SPECIAL SERVICE VEHICLES

The issue of what makes a police vehicle a “police package” is a matter that will be with us for some time. Many law enforcement agencies still require a police vehicle to be capable of participating in a pursuit and look to the manufacturers to put their engineering talents towards that goal. At the same time some law enforcement agencies need a vehicle that has cargo capacity and other attributes, but does not require pursuit capabilities. For this, the manufacturers offer “special service” vehicles.

The Michigan Department of State Police presents this information on “special service” vehicles with the caveat that the reader is aware that these vehicles are not engineered for high speed or pursuit driving. The vehicles were tested in all the categories except vehicle dynamics, which is high-speed handling and represents pursuit applications.

The special service vehicles were tested in the following: Acceleration, Top Speed, Braking, Fuel Economy, and Ergonomics & Communications.

SPECIAL SERVICE VEHICLES ARE NOT ENGINEERED FOR HIGH SPEED AND PURSUIT APPLICATIONS.



Chevrolet Tahoe 4WD



TEST VEHICLE DESCRIPTION

MAKE Chevrolet	MODEL Tahoe 5W4 – 4WD		SALES CODE NO. CK10706	
ENGINE DISPLACEMENT	CUBIC INCHES 325		LITERS 5.3	
FUEL SYSTEM	Sequential Port Fuel Injection		EXHAUST Single	
HORSEPOWER (SAE NET)	320 @ 5200 RPM		ALTERNATOR 160	
TORQUE	320 ft-lbs @ 5200 RPM		BATTERY 730 CCA	
COMPRESSION RATIO	9.5:1			
TRANSMISSION	MODEL 4L60E		TYPE 4 – Speed Automatic Overdrive	
	LOCKUP TORQUE CONVERTER? Yes			
	OVERDRIVE? Yes			
AXLE RATIO	3.73			
STEERING	Power – Rack & Pinion			
TURNING CIRCLE (CURB TO CURB)	39.0 ft.			
TIRE SIZE, LOAD & SPEED RATING	Goodyear Wrangler P265/70R17 113S			
SUSPENSION TYPE (FRONT)	Independent, single coil over shock w/ stabilizer bar			
SUSPENSION TYPE (REAR)	Multi-link with coil springs			
GROUND CLEARANCE, MINIMUM	9.1 in.		LOCATION Rear Axle	
BRAKE SYSTEM	Vacuum boost, power, anti-lock			
BRAKES, FRONT	TYPE Disc		SWEPT AREA 213 sq. in.	
BRAKES, REAR	TYPE Disc		SWEPT AREA 133 sq. in.	
FUEL CAPACITY	GALLONS 26.0		LITERS 98.4	
GENERAL MEASUREMENTS	WHEELBASE 116 in.		LENGTH 202.0 in.	
	TEST WEIGHT 5570		HEIGHT 76.9 in.	
HEADROOM	FRONT	40.3 in.	REAR	39.2 in.
LEGROOM	FRONT	41.3 in.	REAR	39.0 in.
SHOULDER ROOM	FRONT	65.3 in.	REAR	65.2 in.
HIPROOM	FRONT	64.4 in.	REAR	60.6 in.
INTERIOR VOLUME *MAX. CARGO IS W/REAR SEATS FOLDED DOWN	FRONT	62.9 cu. ft.	REAR	57.68 cu. ft.
	COMB	120.58 cu. ft.	*MAX. CARGO 108.9 cu. ft.	
EPA MILEAGE EST. (MPG)	CITY 15	HIGHWAY 19	COMBINED 16	

Dodge Magnum 3.5L



TEST VEHICLE DESCRIPTION

MAKE Dodge	MODEL Magnum		SALES CODE NO. 27B	
ENGINE DISPLACEMENT	CUBIC INCHES 214		LITERS	3.5
FUEL SYSTEM	Sequential Port Fuel Injection		EXHAUST	Single
HORSEPOWER (SAE NET)	250 @ 6400		ALTERNATOR	160 amp.
TORQUE	250 lbs-ft @ 3800		BATTERY	730 CCA
COMPRESSION RATIO	10.0:1			
TRANSMISSION	MODEL A580		TYPE 5 Speed Electronic Automatic	
	LOCKUP TORQUE CONVERTER? Yes			
	OVERDRIVE? Yes			
AXLE RATIO	2.87:1			
STEERING	Power Rack & Pinion			
TURNING CIRCLE (CURB TO CURB)	38.9			
TIRE SIZE, LOAD & SPEED RATING	Goodyear Integrity P215/65R17 98T			
SUSPENSION TYPE (FRONT)	Independent High Arm SLA with Dual Ball Joint Lower, Coil Spring, Sway Bar			
SUSPENSION TYPE (REAR)	Independent Multi-Link, Coil Spring, Sway Bar			
GROUND CLEARANCE, MINIMUM	5.2 in.	LOCATION Fascia Belly Pan		
BRAKE SYSTEM	Power, Single Piston Front/Single Piston Rear, Anti-Lock			
BRAKES, FRONT	TYPE Vented Disc		SWEPT AREA 264 sq. in.	
BRAKES, REAR	TYPE Solid Disc		SWEPT AREA 218 sq. in.	
FUEL CAPACITY	GALLONS	18	LITERS	68
GENERAL MEASUREMENTS	WHEELBASE 120 in.		LENGTH	197.7 in.
	TEST WEIGHT 3905		HEIGHT	58.3 in.
HEADROOM	FRONT	38.7 in.	REAR	38.1 in.
LEGROOM	FRONT	41.8 in.	REAR	40.2 in.
SHOULDER ROOM	FRONT	58.7 in.	REAR	57.6 in.
HIPROOM	FRONT	56.2 in.	REAR	56.1 in.
INTERIOR VOLUME	FRONT	55.0 cu. ft.	REAR	51.0 cu. ft.
	COMB	106.0 cu. ft.	TRUNK	27.3 cu. ft.
EPA MILEAGE EST. (MPG)	CITY 19	HIGHWAY 27		COMBINED 22

Ford Escape 4WD Hybrid



TEST VEHICLE DESCRIPTION

MAKE Ford	MODEL Escape Hybrid FWD		SALES CODE NO. U49	
ENGINE DISPLACEMENT	CUBIC INCHES 140		LITERS 2.3-liter	
FUEL SYSTEM	Sequential multi-port electronic		EXHAUST Single	
HORSEPOWER (SAE NET)	(155 w/ Hybrid) @ 6,000 rpm		ALTERNATOR Permanent Magnet AC synchronous motor	
TORQUE	124 lbs.-ft. @ 4,250 rpm		BATTERY 330 volt nickel - metal hydride battery pack	
COMPRESSION RATIO	12.3:1			
TRANSMISSION	MODEL T-032		TYPE Electronically Controlled Continuously Variable	
	LOCKUP TORQUE CONVERTER Damper			
	OVERDRIVE N/A for Continuously Variable Transmission			
AXLE RATIO	2.93:1			
STEERING	Rack and pinion with electric power assist			
TURNING CIRCLE (CURB TO CURB)	37.7 ft			
TIRE SIZE, LOAD & SPEED RATING	Continential Contitrac P235/70R16			
SUSPENSION TYPE (FRONT)	Independent, MacPherson struts, coil springs and stabilizer bar			
SUSPENSION TYPE (REAR)	Multi-link independent			
GROUND CLEARANCE, MINIMUM	8.4	LOCATION Rear suspension		
BRAKE SYSTEM	Four wheel power brakes with standard 4-sensor, 4-channel anti-lock braking system (ABS)			
BRAKES, FRONT	TYPE 11.9-in vented disc		SWEPT AREA 248.2 sq. in.	
BRAKES, REAR	TYPE 11.9-in disc		SWEPT AREA 218.5 sq. in.	
FUEL CAPACITY	GALLONS 15		LITERS 57	
GENERAL MEASUREMENTS	WHEELBASE 103.2		LENGTH 174.9	
	TEST WEIGHT 3835		HEIGHT 69.9	
HEADROOM	FRONT 40.4	REAR 39.2		
LEGROOM	FRONT 41.6	REAR 35.6		
SHOULDER ROOM	FRONT 65.3	REAR 55.9		
HIPROOM	FRONT 53.2	REAR 49.1		
INTERIOR VOLUME *MAX. CARGO IS W/REAR SEATS FOLDED DOWN	FRONT 54.8	REAR 44.4		
	COMB 99.2	*MAX CARGO 65.5		
EPA MILEAGE EST. (MPG)	CITY 36	HIGHWAY 31	COMBINED 34	

Ford Explorer 2WD



TEST VEHICLE DESCRIPTION

MAKE Ford	MODEL Explorer 2WD		SALES CODE NO. U63	
ENGINE DISPLACEMENT	CUBIC INCHES 281		LITERS	4.6
FUEL SYSTEM	Sequential Multiport Fuel Injection		EXHAUST	Single
HORSEPOWER (SAE NET)	292@ 5750 RPM		ALTERNATOR	130 amp.
TORQUE	300 lb-ft @ 3950 RPM		BATTERY	650 CCA
COMPRESSION RATIO	9.3:1			
TRANSMISSION	MODEL 5R55	TYPE 6-Speed Automatic Overdrive		
	LOCKUP TORQUE CONVERTER? Yes			
	OVERDRIVE? Yes			
AXLE RATIO	3.55			
STEERING	Power rack and pinion			
TURNING CIRCLE (CURB TO CURB)	36.8 ft.			
TIRE SIZE, LOAD & SPEED RATING	Michelin Cross Terrain P235/65R18			
SUSPENSION TYPE (FRONT)	Independent SLA with coil spring			
SUSPENSION TYPE (REAR)	Independent SLA with coil spring			
GROUND CLEARANCE, MINIMUM	8.5 in.	LOCATION Transmission crossmember		
BRAKE SYSTEM	Power disc w/ 4-wheel ABS			
BRAKES, FRONT	TYPE	Disc	SWEPT AREA	239.3sq. in.
BRAKES, REAR	TYPE	Disc	SWEPT AREA	217.3 sq. in.
FUEL CAPACITY	GALLONS	22.5	LITERS	85.1
GENERAL MEASUREMENTS	WHEELBASE	113.7 in.	LENGTH	193.4 in.
	TEST WEIGHT	4844	HEIGHT	72.2 in.
HEADROOM	FRONT	39.8 in.	REAR	38.7 in.
LEGROOM	FRONT	42.4 in.	REAR	36.9 in.
SHOULDER ROOM	FRONT	59.0 in.	REAR	58.9 in.
HIPROOM	FRONT	55.4 in.	REAR	55.5 cu. ft.
INTERIOR VOLUME *MAX. CARGO IS W/REAR SEATS FOLDED DOWN	FRONT	57.6 cu. ft.	REAR	48.7 cu. ft.
	COMB	106.3 cu. ft.	*MAX. CARGO	83.7 cu. ft.
EPA MILEAGE EST. (MPG)	CITY 15	HIGHWAY 21	COMBINED 17	

Ford Expedition 2WD



TEST VEHICLE DESCRIPTION

MAKE Ford	MODEL Expedition 2WD		SALES CODE NO. U15	
ENGINE DISPLACEMENT	CUBIC INCHES 330		LITERS	5.4 3V
FUEL SYSTEM	Sequential Multiport Fuel Injection		EXHAUST	Single
HORSEPOWER (SAE NET)	300 @ 5000 RPM		ALTERNATOR	150 amp.
TORQUE	365 ft-lbs @ 3750 RPM		BATTERY	650 CCA
COMPRESSION RATIO	9.8:1			
TRANSMISSION	MODEL 6R75		TYPE 6-Speed Automatic	
	LOCKUP TORQUE CONVERTER? Yes			
	OVERDRIVE? Yes			
AXLE RATIO	3.31 standard, 3.73 optional			
STEERING	Low-friction rack and pinion with power assist			
TURNING CIRCLE (CURB TO CURB)	40.8 ft.			
TIRE SIZE, LOAD & SPEED RATING	Pirelli Scorpion P265/70R17			
SUSPENSION TYPE (FRONT)	Independent, double-wishbone, short- and long-arms (SLA) design with coil-over shocks, 36 mm stabilizer bar			
SUSPENSION TYPE (REAR)	Independent, multilink design with coil-over shocks. 18mm, 19 mm or 21 mm stabilizer bar			
GROUND CLEARANCE, MINIMUM	8.7 in.	LOCATION Rear differential		
BRAKE SYSTEM	Four wheel power disc brakes with standard 4 sensor, 4 channel anti-lock braking system (ABS) and AdvanceTrac® with Roll Stability Control			
BRAKES, FRONT	TYPE Disc		SWEPT AREA 283.6 sq. in.	
BRAKES, REAR	TYPE Disc		SWEPT AREA 159.0 sq. in.	
FUEL CAPACITY	GALLONS 28.0		LITERS	106.0
GENERAL MEASUREMENTS	WHEELBASE 119.0 in.		LENGTH	205.8 in.
	TEST WEIGHT 5732		HEIGHT	76.7 in.
HEADROOM	FRONT 39.6 in.		REAR	39.8 in.
LEGROOM	FRONT 41.2 in.		REAR	39.1 in.
SHOULDER ROOM	FRONT 63.2 in.		REAR	63.7 in.
HIPROOM	FRONT 60.2 in.		REAR	59.1 in.
INTERIOR VOLUME *MAX. CARGO IS W/REAR SEATS FOLDED DOWN	FRONT 59.6 cu. ft.		REAR 57.3 cu. ft.	
	COMB 116.9 cu. ft.		*MAX. CARGO 108.3 cu. ft.	
EPA MILEAGE EST. (MPG)	CITY 14	HIGHWAY 20		COMBINED 16

Ford Expedition EL 2WD



TEST VEHICLE DESCRIPTION

MAKE Ford	MODEL Expedition EL 2WD		0SALES CODE NO. K15	
ENGINE DISPLACEMENT	CUBIC INCHES 330		LITERS 5.4 3V	
FUEL SYSTEM	Sequential Multiport Fuel Inj.		EXHAUST Single	
HORSEPOWER (SAE NET)	300 @ 5000 RPM		ALTERNATOR 150 amp.	
TORQUE	365 ft-lbs @ 3750 RPM		BATTERY 650 CCA	
COMPRESSION RATIO	9.8:1			
TRANSMISSION	MODEL 6R75		TYPE 6-speed automatic	
	LOCKUP TORQUE CONVERTER? Yes			
	OVERDRIVE? Yes			
AXLE RATIO	3.31 STD, 3.73 optional			
STEERING	Low-friction rack and pinion with power assist			
TURNING CIRCLE (CURB TO CURB)	43.9 ft.			
TIRE SIZE, LOAD & SPEED RATING	Pirelli Scorpion P265/70R17			
SUSPENSION TYPE (FRONT)	Independent, double-wishbone, short- and long-arms (SLA) design with coil-over shocks. 36 mm stabilizer bar			
SUSPENSION TYPE (REAR)	Independent, multilink design with coil-over shocks. 18 mm, 19 mm or 21 mm stabilizer bar			
GROUND CLEARANCE, MINIMUM	8.7 in.		LOCATION Rear differential	
BRAKE SYSTEM	Four wheel power disc brakes with standard 4 sensor, 4 channel anti-lock braking system (ABS) and AdvanceTrac® with Roll Stability Control			
BRAKES, FRONT	TYPE Disc		SWEPT AREA 283.6 sq. in.	
BRAKES, REAR	TYPE Disc		SWEPT AREA 159.0 sq. in.	
FUEL CAPACITY	GALLONS 33.5		LITERS 126.8	
GENERAL MEASUREMENTS	WHEELBASE 131.0 in.		LENGTH 221.3 in.	
	TEST WEIGHT 5967		HEIGHT 78.3 in	
HEADROOM	FRONT 39.5 in.		REAR 39.7 in.	
LEGROOM	FRONT 41.1 in.		REAR 39.1 in.	
SHOULDER ROOM	FRONT 63.2 in.		REAR 63.7 in.	
HIPROOM	FRONT 60.2 in.		REAR 59.1 in.	
INTERIOR VOLUME *MAX. CARGO IS W/REAR SEATS FOLDED DOWN	FRONT 59.6		REAR 57.3	
	COMB 116.9		*MAX. CARGO 130.8	
EPA MILEAGE EST. (MPG)	*CITY See Note	*HIGHWAY See Note		*COMBINED See Note

Trucks with Gross Vehicle Weight Ratings over 8,500 lbs are not included in the EPA fuel economy rating system. Fuel economy information on these models is generally not available because of wide variances in vehicle loading and operational conditions between various customer applications.

Ford F-250 Crew Cab 2WD



TEST VEHICLE DESCRIPTION

MAKE	MODEL F250 Crew Cab XL 4x2		SALES CODE NO. W20	
ENGINE DISPLACEMENT	CUBIC INCHES 330		LITERS 5.4L V8	
FUEL SYSTEM	EFI		EXHAUST Single	
HORSEPOWER (SAE NET)	300 @ 5000		ALTERNATOR 115 amp	
TORQUE	365 @ 3750		BATTERY 650 CCA	
COMPRESSION RATIO	9:0:1			
TRANSMISSION	MODEL 5R110W		TYPE 5 Speed Electronic Automatic	
	LOCKUP TORQUE CONVERTER? Yes			
	OVERDRIVE? Yes			
AXLE RATIO	3.73 limited slip			
STEERING	Power; type – recirculating ball			
TURNING CIRCLE (CURB TO CURB)	51.8 ft.			
TIRE SIZE, LOAD & SPEED RATING	Continental Contitrac LT245/75RR17			
SUSPENSION TYPE (FRONT)	Coil, computer selected			
SUSPENSION TYPE (REAR)	Leaf, two-stage variable rate main			
GROUND CLEARANCE, MINIMUM	8.5	LOCATION Rear Axle		
BRAKE SYSTEM	4-wheel disc with ABS			
BRAKES, FRONT	TYPE Disc.		SWEPT AREA 306.4 sq. in.	
BRAKES, REAR	TYPE Disc.		SWEPT AREA 272.01 sq. in.	
FUEL CAPACITY	GALLONS 29.0		LITERS 109.0	
GENERAL MEASUREMENTS	WHEELBASE 156.2 in.		LENGTH 245.8 in.	
	TEST WEIGHT 6033		HEIGHT 80.0 in.	
HEADROOM	FRONT 41.3 in.		REAR 41.8in.	
LEGROOM	FRONT 41.0 in.		REAR 41.7 in.	
SHOULDER ROOM	FRONT 68.0 in.		REAR 68.0 in.	
HIPROOM	FRONT 67.4 in.		REAR 67.3 in.	
INTERIOR VOLUME *MAX. CARGO IS W/REAR SEATS FOLDED DOWN	FRONT 66.6 cu. ft..		REAR 67.0 cu. ft.	
	COMB 133.6 cu. ft.		*MAX. CARGO 64.8 cu. ft.	
EPA MILEAGE EST. (MPG)	*CITY See Note	*HIGHWAY See Note		*COMBINED See Note

Trucks with Gross Vehicle Weight Ratings over 8,500 lbs are not included in the EPA fuel economy rating system. Fuel economy information on these models is generally not available because of wide variances in vehicle loading and operational conditions between various customer applications.

NOT DESIGNED FOR HIGH SPEED OR PURSUIT DRIVING

TEST VEHICLE DESCRIPTION SUMMARY

	Chevrolet 4WD Tahoe	Ford Escape	Dodge Magnum	Ford Expedition
ENGINE DISPLACEMENT – CU. IN.	325	140	214	330
ENGINE DISPLACEMENT – LITERS	5.3	2.3	3.5	5.4
ENGINE FUEL SYSTEM	SPFI	SMFE	SPFI	SMPFI
HORSEPOWER (SAE NET)	320	155	250	300
TORQUE (FT. LBS.)	320	124	250	365
COMPRESSION RATIO	9.5:1	12.3:1	10.1:1	9.8:1
AXLE RATIO	3.73	2.93:1	3.64:1	3.31
TURNING CIRCLE – FT. CURB TO CURB	39.0	37.7	38.9	40.8
TRANSMISSION	4 Speed auto	Elec. Controlled Continuous Variable	5 Speed Automatic	6 Speed Automatic
TRANSMISSION MODEL NUMBER	4L60E	T-032	A580	6R75
LOCKUP TORQUE CONVERTER	Yes	Yes	Yes	Yes
TRANSMISSION OVERDRIVE	Yes	N/A	Yes	Yes
TIRE SIZE	265/70R	P235/70R	P215/65R	P255/70R
WHEEL RIM SIZE – INCHES	17	16	17	17
GROUND CLEARANCE – INCHES	9.1	8.4	5.2	8.7
BRAKE SYSTEM	Power, ABS	Power, ABS	Power, ABS	Power, ABS
BRAKES – FRONT TYPE	Disc	Vented disc	Vented disc	Disc
BRAKES – REAR TYPE	Disc	Disc	Solid disc	Disc
FUEL CAPACITY – GALLONS	26	15	18	28
FUEL CAPACITY – LITERS	98.4	57	68	106
OVERALL LENGTH – INCHES	202.0	174.9	197.7	205.8
OVERALL HEIGHT – INCHES	76.9	69.9	58.3	76.7
TEST WEIGHT – LBS.	5570	3835	3905	5732
WHEELBASE – INCHES	116	103.2	120	119
HEADROOM FRONT – INCHES	40.3	40.4	38.7	39.6
HEADROOM REAR – INCHES	39.2	39.2	38.1	39.8
LEGROOM FRONT – INCHES	41.3	41.6	41.8	41.2
LEGROOM REAR – INCHES	39.0	35.6	40.2	39.1
SHOULDER ROOM FRONT – INCHES	65.3	65.3	58.7	63.2
SHOULDER ROOM REAR – INCHES	65.2	55.9	57.6	63.7
HIPROOM FRONT – INCHES	64.4	53.2	56.2	60.2
HIPROOM REAR – INCHES	60.6	49.1	56.1	59.1
INTERIOR VOLUME FRONT – CU. FT.	62.9	54.8	55.0	59.6
INTERIOR VOLUME REAR – CU. FT.	57.68	44.4	51.0	57.3
INTERIOR VOLUME COMB. – CU. FT.	120.58	99.2	106.0	116.9
REAR MAXIMUM CARGO – CU. FT.	108.9	65.5	27.3*	108.3
EPA MILEAGE – CITY – MPG	15	36	19	14
EPA MILEAGE – HIGHWAY – MPG	19	31	27	20
EPA MILEAGE – COMBINED – MPG	16	34	22	16

TEST VEHICLE DESCRIPTION SUMMARY

	Ford Explorer	Ford Expedition EL	Ford F-250
ENGINE DISPLACEMENT – CU. IN.	281	330	330
ENGINE DISPLACEMENT – LITERS	4.6	5.4	5.4
ENGINE FUEL SYSTEM	SPFI	SMFI	EFI
HORSEPOWER (SAE NET)	292	300	300
TORQUE (FT. LBS.)	300	365	365
COMPRESSION RATIO	9.3:1	9.8:1	9.0:1
AXLE RATIO	3.55	3.31	3.73
TURNING CIRCLE – FT. CURB TO CURB	36.8	43.9	51.8
TRANSMISSION	6 Speed Auto	6 Speed Auto	5 Speed Auto
TRANSMISSION MODEL NUMBER	5R55	6R75	5R110W
LOCKUP TORQUE CONVERTER	Yes	Yes	Yes
TRANSMISSION OVERDRIVE	Yes	Yes	Yes
TIRE SIZE	P235/65R	P255/70R	LT245/75R
WHEEL RIM SIZE – INCHES	18	17	17
GROUND CLEARANCE – INCHES	8.5	8.7	8.5
BRAKE SYSTEM	Power, ABS	Power, ABS	Power, ABS
BRAKES – FRONT TYPE	Disc	Disc	Disc
BRAKES – REAR TYPE	Disc	Disc	Disc
FUEL CAPACITY – GALLONS	22.5	33.5	29.0
FUEL CAPACITY – LITERS	85.1	126.8	109.0
OVERALL LENGTH – INCHES	193.4	221.3	245.8
OVERALL HEIGHT – INCHES	72.2	78.3	80.0
TEST WEIGHT – LBS.	4844	5967	6033
WHEELBASE – INCHES	113.7	131.0	156.2
HEADROOM FRONT – INCHES	39.8	39.5	41.3
HEADROOM REAR – INCHES	38.7	39.7	41.8
LEGROOM FRONT – INCHES	42.4	41.1	41.0
LEGROOM REAR – INCHES	36.9	39.1	41.7
SHOULDER ROOM FRONT – INCHES	59.0	63.2	68.0
SHOULDER ROOM REAR – INCHES	58.9	63.7	68.0
HIPROOM FRONT – INCHES	55.4	60.2	67.4
HIPROOM REAR – INCHES	55.5	59.1	67.3
INTERIOR VOLUME FRONT – CU. FT.	57.6	59.6	66.6
INTERIOR VOLUME REAR – CU. FT.	48.7	57.3	67.0
INTERIOR VOLUME COMB. – CU. FT.	106.3	116.9	133.6
REAR MAXIMUM CARGO – CU. FT.	83.7	130.8	64.8
EPA MILEAGE – CITY – MPG	15	*N/A	*N/A
EPA MILEAGE – HIGHWAY – MPG	21	*N/A	*N/A
EPA MILEAGE – COMBINED – MPG	17	*N/A	*N/A

Trucks with Gross Vehicle Weight Ratings over 8,500 lbs are not included in the EPA fuel economy rating system. Fuel economy information on these models is generally not available because of wide variances in vehicle loading and operational conditions between various customer applications.

SUMMARY OF ACCELERATION AND TOP SPEED

ACCELERATION*	Chevrolet Tahoe 4WD 5.3L SPFI	Ford Explorer 2WD 4.6L SMFI	Ford Expedition 2WD 5.4L SMFI	Dodge Magnum 3.5L SPFI
0 – 20 mph (sec.)	2.17	1.93	2.09	1.99
0 – 30 mph (sec.)	3.45	3.09	3.31	3.32
0 – 40 mph (sec.)	4.82	4.83	5.21	4.77
0 – 50 mph (sec.)	6.92	6.69	7.14	6.52
0 – 60 mph (sec.)	9.18	8.84	9.65	8.81
0 – 70 mph (sec.)	11.64	11.93	12.67	11.44
0 – 80 mph (sec.)	15.95	15.14	16.08	14.53
0 – 90 mph (sec.)	20.82	19.06	20.32	18.90
0 – 100 mph (sec.)		24.88	26.68	24.11
TOP SPEED (mph)	98	101	104	116
QUARTER MILE				
Time (sec.)	17.07	16.89	17.33	16.76
Speed (miles)	82.43	84.88	83.18	85.28

ACCELERATION*	Ford Expedition EL 2WD 5.4L SMFI	Ford Escape Hybrid 4WD 2.3L SMPE	Ford F-250 2WD 5.4L EFI
0 – 20 mph (sec.)	1.99	2.86	2.34
0 – 30 mph (sec.)	3.36	4.65	3.79
0 – 40 mph (sec.)	5.13	6.76	5.54
0 – 50 mph (sec.)	7.04	9.45	7.59
0 – 60 mph (sec.)	9.77	12.76	10.31
0 – 70 mph (sec.)	12.68	17.09	13.39
0 – 80 mph (sec.)	16.13	22.56	18.15
0 – 90 mph (sec.)	20.94	31.31	24.56
0 – 100 mph (sec.)	31.58	52.30	
TOP SPEED (mph)	100	102	95
QUARTER MILE			
Time (sec.)	17.31	19.38	17.81
Speed (miles)	82.63	74.63	79.58

NOT DESIGNED FOR HIGH SPEED OR PURSUIT DRIVING

BRAKE TESTING

TEST LOCATION: DaimlerChrysler Proving Grounds

DATE: September 16, 2006

BEGINNING Time: 8:55 a.m.

TEMPERATURE: 57.6°F

MAKE & MODEL: Ford Escape 2.3L 2WD

BRAKE SYSTEM: Anti-lock

Phase I

BRAKE HEAT-UP: (Two 90 → 0 mph decelerations @ 22 ft./sec.²)

TEST: (Six 60 → mph impending skid (ABS) maximum deceleration rate stops)

	Initial Velocity	Stopping Distance	Deceleration Rate
Stop #1	62.0 mph	149.4 feet	27.70 ft/s ²
Stop #2	59.7 mph	139.7 feet	27.44 ft/s ²
Stop #3	59.8 mph	137.5 feet	27.97 ft/s ²
Stop #4	59.4 mph	136.3 feet	27.85 ft/s ²
Stop #5	60.7 mph	136.0 feet	29.15 ft/s ²
Stop #6	59.8 mph	136.3 feet	28.18 ft/s ²

AVERAGE DECELERATION RATE

28.05 ft/s²

HEAT SOAK (4 minutes)

Phase II

BRAKE HEAT-UP: (Two 90 → 0 mph decelerations @ 22 ft./sec.²)

TEST: (Six 60 → mph impending skid (ABS) maximum deceleration rate stops)

	Initial Velocity	Stopping Distance	Deceleration Rate
Stop #1	60.4 mph	141.3 feet	27.77 ft/s ²
Stop #2	60.2 mph	139.9 feet	27.87 ft/s ²
Stop #3	60.4 mph	145.3 feet	26.98 ft/s ²
Stop #4	60.8 mph	143.1 feet	27.78 ft/s ²
Stop #5	60.6 mph	143.0 feet	27.61 ft/s ²
Stop #6	60.7 mph	145.7 feet	27.23 ft/s ²

AVERAGE DECELERATION RATE

27.54 ft/s²

Phase III

	Yes/No
Evidence of severe fading?	<u>No</u>
Vehicle stopped in straight line?	<u>Yes</u>
Vehicle stopped within correct lane?	<u>Yes</u>

OVERALL AVERAGE DECEL. RATE:

27.79 ft/s²

Projected Stopping Distance from 60.0 mph

139.3

NOT DESIGNED FOR HIGH SPEED OR PURSUIT DRIVING

BRAKE TESTING

TEST LOCATION: DaimlerChrysler Proving Grounds

DATE: September 16, 2006

BEGINNING Time: 5:01 p.m.

TEMPERATURE: 71.3°F

MAKE & MODEL: Ford Explorer 4.6L 2WD

BRAKE SYSTEM: Anti-lock

Phase I

BRAKE HEAT-UP: (Two 90 → 0 mph decelerations @ 22 ft/sec.²)

TEST: (Six 60 → mph impending skid (ABS) maximum deceleration rate stops)

	Initial Velocity	Stopping Distance	Deceleration Rate
Stop #1	59.9 mph	159.0 feet	24.24 ft/s ²
Stop #2	60.2 mph	159.5 feet	24.39 ft/s ²
Stop #3	59.5 mph	158.9 feet	23.99 ft/s ²
Stop #4	60.3 mph	159.1 feet	24.60 ft/s ²
Stop #5	60.4 mph	160.7 feet	24.41 ft/s ²
Stop #6	60.5 mph	155.9 feet	25.25 ft/s ²

AVERAGE DECELERATION RATE

24.48 ft/s²

HEAT SOAK (4 minutes)

Phase II

BRAKE HEAT-UP: (Two 90 → 0 mph decelerations @ 22 ft/sec.²)

TEST: (Six 60 → mph impending skid (ABS) maximum deceleration rate stops)

	Initial Velocity	Stopping Distance	Deceleration Rate
Stop #1	60.4 mph	152.2 feet	25.78 ft/s ²
Stop #2	60.5 mph	154.2 feet	25.53 ft/s ²
Stop #3	60.5 mph	155.4 feet	25.35 ft/s ²
Stop #4	60.1 mph	150.2 feet	25.91 ft/s ²
Stop #5	60.3 mph	150.3 feet	26.03 ft/s ²
Stop #6	59.8 mph	151.3 feet	25.42 ft/s ²

AVERAGE DECELERATION RATE

25.67 ft/s²

Phase III

	Yes/No
Evidence of severe fading?	<u>No</u>
Vehicle stopped in straight line?	<u>Yes</u>
Vehicle stopped within correct lane?	<u>Yes</u>

OVERALL AVERAGE DECEL. RATE: 25.07 ft/s²

Projected Stopping Distance from 60.0 mph 154.4

NOT DESIGNED FOR HIGH SPEED OR PURSUIT DRIVING

BRAKE TESTING

TEST LOCATION: DaimlerChrysler Proving Grounds

DATE: September 16, 2006

BEGINNING Time: 10:16 a.m.

TEMPERATURE: 60.6°F

MAKE & MODEL: Ford Expedition 5.4L 2WD

BRAKE SYSTEM: Anti-lock

Phase I

BRAKE HEAT-UP: (Two 90 → 0 mph decelerations @ 22 ft/sec.²)

TEST: (Six 60 → mph impending skid (ABS) maximum deceleration rate stops)

	Initial Velocity	Stopping Distance	Deceleration Rate
Stop #1	60.1 mph	154.4 feet	25.12 ft/s ²
Stop #2	60.6 mph	155.3 feet	25.44 ft/s ²
Stop #3	60.3 mph	153.4 feet	25.53 ft/s ²
² Stop #4	60.8 mph	149.4 feet	26.60 ft/s ²
Stop #5	60.7 mph	160.2 feet	24.71 ft/s ²
Stop #6	60.7 mph	149.1 feet	26.59 ft/s ²

AVERAGE DECELERATION RATE

25.66 ft/s²

HEAT SOAK (4 minutes)

Phase II

BRAKE HEAT-UP: (Two 90 → 0 mph decelerations @ 22 ft/sec.²)

TEST: (Six 60 → mph impending skid (ABS) maximum deceleration rate stops)

	Initial Velocity	Stopping Distance	Deceleration Rate
Stop #1	59.8 mph	146.0 feet	26.31 ft/s ²
Stop #2	60.1 mph	155.0 feet	25.10 ft/s ²
Stop #3	59.2 mph	150.1 feet	25.14 ft/s ²
Stop #4	59.7 mph	151.7 feet	25.28 ft/s ²
Stop #5	60.3 mph	151.3 feet	25.86 ft/s ²
Stop #6	61.0 mph	154.4 feet	25.90 ft/s ²

AVERAGE DECELERATION RATE

25.60 ft/s²

Phase III

	Yes/No
Evidence of severe fading?	<u>No</u>
Vehicle stopped in straight line?	<u>Yes</u>
Vehicle stopped within correct lane?	<u>Yes</u>

OVERALL AVERAGE DECEL. RATE:

25.63 ft/s²

Projected Stopping Distance from 60.0 mph 151.1

NOT DESIGNED FOR HIGH SPEED OR PURSUIT DRIVING

BRAKE TESTING

TEST LOCATION: DaimlerChrysler Proving Grounds

DATE: September 16, 2006

BEGINNING Time: 8:25 a.m.

TEMPERATURE: 56.3°F

MAKE & MODEL: Ford Expedition EL 5.4L 2WD

BRAKE SYSTEM: Anti-lock

Phase I

BRAKE HEAT-UP: (Two 90 → 0 mph decelerations @ 22 ft/sec.²)

TEST: (Six 60 → mph impending skid (ABS) maximum deceleration rate stops)

	Initial Velocity	Stopping Distance	Deceleration Rate
Stop #1	59.3 mph	153.6 feet	24.64 ft/s ²
Stop #2	60.5 mph	155.5 feet	25.30 ft/s ²
Stop #3	60.5 mph	151.7 feet	25.94 ft/s ²
Stop #4	60.6 mph	150.6 feet	26.24 ft/s ²
Stop #5	60.5 mph	152.3 feet	25.82 ft/s ²
Stop #6	60.2 mph	149.8 feet	26.04 ft/s ²

AVERAGE DECELERATION RATE

25.66 ft/s²

HEAT SOAK (4 minutes)

Phase II

BRAKE HEAT-UP: (Two 90 → 0 mph decelerations @ 22 ft/sec.²)

TEST: (Six 60 → mph impending skid (ABS) maximum deceleration rate stops)

	Initial Velocity	Stopping Distance	Deceleration Rate
Stop #1	60.3 mph	144.5 feet	27.10 ft/s ²
Stop #2	60.5 mph	147.8 feet	26.62 ft/s ²
Stop #3	60.6 mph	146.0 feet	27.05 ft/s ²
Stop #4	60.2 mph	143.7 feet	27.12 ft/s ²
Stop #5	60.5 mph	149.7 feet	26.31 ft/s ²
Stop #6	60.5 mph	151.8 feet	25.92 ft/s ²

AVERAGE DECELERATION RATE

26.69 ft/s²

Phase III

	Yes/No
Evidence of severe fading?	<u>No</u>
Vehicle stopped in straight line?	<u>Yes</u>
Vehicle stopped within correct lane?	<u>Yes</u>

OVERALL AVERAGE DECEL. RATE:

26.18 ft/s²

Projected Stopping Distance from 60.0 mph 147.9

NOT DESIGNED FOR HIGH SPEED OR PURSUIT DRIVING

BRAKE TESTING

TEST LOCATION: DaimlerChrysler Proving Grounds

DATE: September 16, 2006

BEGINNING Time: 9:28 a.m.

TEMPERATURE: 58.3°F

MAKE & MODEL: Ford F250 Crew Cab 2WD

BRAKE SYSTEM: Anti-lock

Phase I

BRAKE HEAT-UP: (Two 90 → 0 mph decelerations @ 22 ft/sec.²)

TEST: (Six 60 → mph impending skid (ABS) maximum deceleration rate stops)

	Initial Velocity	Stopping Distance	Deceleration Rate
Stop #1	61.0 mph	160.3 feet	24.96 ft/s ²
Stop #2	60.8 mph	157.4 feet	25.22 ft/s ²
Stop #3	60.5 mph	155.6 feet	25.31 ft/s ²
Stop #4	61.0 mph	165.6 feet	24.14 ft/s ²
Stop #5	60.1 mph	154.9 feet	25.07 ft/s ²
Stop #6	61.2 mph	160.9 feet	25.07 ft/s ²

AVERAGE DECELERATION RATE

24.96 ft/s²

HEAT SOAK (4 minutes)

Phase II

BRAKE HEAT-UP: (Two 90 → 0 mph decelerations @ 22 ft/sec.²)

TEST: (Six 60 → mph impending skid (ABS) maximum deceleration rate stops)

	Initial Velocity	Stopping Distance	Deceleration Rate
Stop #1	60.8 mph	160.8 feet	24.73 ft/s ²
Stop #2	60.7 mph	158.5 feet	24.98 ft/s ²
Stop #3	61.0 mph	157.0 feet	25.53 ft/s ²
Stop #4	60.8 mph	157.8 feet	25.24 ft/s ²
Stop #5	61.4 mph	165.6 feet	24.52 ft/s ²
Stop #6	60.3 mph	156.9 feet	24.93 ft/s ²

AVERAGE DECELERATION RATE

24.99 ft/s²

Phase III

	Yes/No
Evidence of severe fading?	<u>No</u>
Vehicle stopped in straight line?	<u>Yes</u>
Vehicle stopped within correct lane?	<u>Yes</u>

OVERALL AVERAGE DECEL. RATE: 24.97 ft/s²

Projected Stopping Distance from 60.0 mph 155.0

NOT DESIGNED FOR HIGH SPEED OR PURSUIT DRIVING

BRAKE TESTING

TEST LOCATION: DaimlerChrysler Proving Grounds

DATE: September 16, 2006

BEGINNING Time: 10:42 a.m.

TEMPERATURE: 62.8°F

MAKE & MODEL: Chevrolet Tahoe 5.3L 4WD

BRAKE SYSTEM: Anti-lock

Phase I

BRAKE HEAT-UP: (Two 90 → 0 mph decelerations @ 22 ft/sec.²)

TEST: (Six 60 → mph impending skid (ABS) maximum deceleration rate stops)

	Initial Velocity	Stopping Distance	Deceleration Rate
Stop #1	60.6 mph	147.4 feet	26.84 ft/s ²
Stop #2	60.5 mph	145.3 feet	27.07 ft/s ²
Stop #3	60.0 mph	143.4 feet	26.98 ft/s ²
Stop #4	60.2 mph	145.2 feet	26.86 ft/s ²
Stop #5	60.4 mph	146.7 feet	26.71 ft/s ²
Stop #6	60.1 mph	147.6 feet	26.29 ft/s ²

AVERAGE DECELERATION RATE

26.79 ft/s²

HEAT SOAK (4 minutes)

Phase II

BRAKE HEAT-UP: (Two 90 → 0 mph decelerations @ 22 ft/sec.²)

TEST: (Six 60 → mph impending skid (ABS) maximum deceleration rate stops)

	Initial Velocity	Stopping Distance	Deceleration Rate
Stop #1	60.2 mph	155.2 feet	25.12 ft/s ²
Stop #2	60.2 mph	153.8 feet	25.36 ft/s ²
Stop #3	60.6 mph	156.9 feet	25.16 ft/s ²
Stop #4	60.2 mph	157.3 feet	24.74 ft/s ²
Stop #5	60.1 mph	158.9 feet	24.47 ft/s ²
Stop #6	60.1 mph	163.8 feet	23.76 ft/s ²

AVERAGE DECELERATION RATE

24.77 ft/s²

Phase III

	Yes/No
Evidence of severe fading?	<u>Yes</u>
Vehicle stopped in straight line?	<u>Yes</u>
Vehicle stopped within correct lane?	<u>Yes</u>

OVERALL AVERAGE DECEL. RATE:

25.78 ft/s²

Projected Stopping Distance from 60.0 mph 150.2

NOT DESIGNED FOR HIGH SPEED OR PURSUIT DRIVING

BRAKE TESTING

TEST LOCATION: DaimlerChrysler Proving Grounds

DATE: September 16, 2006

BEGINNING Time: 12:28 p.m.

TEMPERATURE: 68.1°F

MAKE & MODEL: Dodge Magnum 3.5L

BRAKE SYSTEM: Anti-lock

Phase I

BRAKE HEAT-UP: (Two 90 → 0 mph decelerations @ 22 ft.sec.²)

TEST: (Six 60 → mph impending skid (ABS) maximum deceleration rate stops)

	Initial Velocity	Stopping Distance	Deceleration Rate
Stop #1	60.8 mph	145.0 feet	27.44 ft/s ²
Stop #2	61.0 mph	143.9 feet	27.77 ft/s ²
Stop #3	60.2 mph	146.6 feet	26.60 ft/s ²
Stop #4	60.7 mph	145.0 feet	27.30 ft/s ²
Stop #5	59.7 mph	142.8 feet	26.87 ft/s ²
Stop #6	59.3 mph	145.5 feet	25.98 ft/s ²

AVERAGE DECELERATION RATE

26.99 ft/s²

HEAT SOAK (4 minutes)

Phase II

BRAKE HEAT-UP: (Two 90 → 0 mph decelerations @ 22 ft.sec.²)

TEST: (Six 60 → mph impending skid (ABS) maximum deceleration rate stops)

	Initial Velocity	Stopping Distance	Deceleration Rate
Stop #1	60.6 mph	141.7 feet	27.87 ft/s ²
Stop #2	61.0 mph	145.3 feet	27.55 ft/s ²
Stop #3	59.9 mph	138.4 feet	27.88 ft/s ²
Stop #4	60.9 mph	142.8 feet	27.95 ft/s ²
Stop #5	60.4 mph	142.2 feet	27.57 ft/s ²
Stop #6	60.1 mph	139.5 feet	27.89 ft/s ²

AVERAGE DECELERATION RATE

27.79 ft/s²

Phase III

	Yes/No
Evidence of severe fading?	<u>No</u>
Vehicle stopped in straight line?	<u>Yes</u>
Vehicle stopped within correct lane?	<u>Yes</u>

OVERALL AVERAGE DECEL. RATE:

27.39 ft/s²

Projected Stopping Distance from 60.0 mph 141.4

ERGONOMICS AND COMMUNICATIONS

ERGONOMICS	Ford Explorer	Ford Expedition	Chevrolet Tahoe 4WD	Dodge Magnum
FRONT SEAT				
Padding	6.78	7.56	7.33	6.22
Depth of Bucket Seat	6.00	7.00	6.78	5.67
Adjustability – Front to Rear	5.56	6.44	6.67	6.67
Upholstery	7.78	8.22	7.44	6.44
Bucket Seat Design	6.78	7.11	6.67	6.33
Headroom	6.56	7.78	8.89	7.67
Seatbelts	4.56	6.33	6.89	5.67
Ease of Entry and Exit	5.33	5.75	8.22	6.33
Overall Comfort Rating	5.89	6.75	7.67	6.89
REAR SEAT				
Leg room – Front seat back	4.89	6.78	6.44	6.00
Ease of Entry and Exit	4.89	6.22	6.56	5.67
INSTRUMENTATION				
Clarity	6.11	6.89	7.44	6.22
Placement	6.11	6.44	7.44	6.33
VEHICLE CONTROLS				
Pedals, Size and Position	6.56	7.33	7.56	6.56
Power Window Switch	7.44	7.33	8.00	7.00
Inside Door Lock Switch	5.22	6.67	7.22	7.44
Automatic Door Lock Switch	7.22	7.11	7.00	6.00
Outside Mirror Controls	5.89	6.78	7.67	6.22
Steering Wheel, Size, Tilt Release, and Surface	6.11	7.22	7.67	6.44
Heat/AC Vent Placement and Adjustability	6.56	6.89	7.00	7.33
VISIBILITY				
Front (Windshield)	7.11	7.78	8.33	7.89
Rear (Back Window)	6.11	6.22	6.22	4.44
Left Rear Quarter	5.22	5.67	6.22	5.33
Right Rear Quarter	4.44	5.44	5.33	4.67
Outside Rear View Mirrors	6.56	7.33	8.44	6.44
COMMUNICATIONS				
Dashboard Accessibility	5.80	6.60	9.40	7.67
Trunk Accessibility	6.73	7.00	8.53	8.40
Engine Compartment	6.78	7.44	9.44	7.78
TOTAL SCORES	170.98	192.10	208.48	181.74

ERGONOMICS AND COMMUNICATIONS

ERGONOMICS	Ford F-250 Crew Cab	Ford Expedition EL	Ford Escape
FRONT SEAT			
Padding	4.90	7.56	6.00
Depth of Bucket Seat	2.60	7.00	5.89
Adjustability – Front to Rear	4.80	6.44	5.44
Upholstery	5.10	8.22	7.67
Bucket Seat Design	0.00	7.11	6.00
Headroom	8.30	7.78	6.67
Seatbelts	5.50	6.33	5.67
Ease of Entry and Exit	5.50	5.75	6.00
Overall Comfort Rating	5.40	6.75	5.63
REAR SEAT			
Leg room – Front seat back	6.90	6.78	4.11
Ease of Entry and Exit	5.20	6.22	4.11
INSTRUMENTATION			
Clarity	6.20	6.89	7.11
Placement	5.80	6.44	7.33
VEHICLE CONTROLS			
Pedals, Size and Position	6.50	7.33	6.44
Power Window Switch	0.00	7.33	6.78
Inside Door Lock Switch	5.60	6.67	6.78
Automatic Door Lock Switch	0.00	7.11	7.11
Outside Mirror Controls	0.00	6.78	5.22
Steering Wheel, Size, Tilt Release, and Surface	4.90	7.22	6.22
Heat/AC Vent Placement and Adjustability	5.70	6.89	7.00
VISIBILITY			
Front (Windshield)	7.60	7.78	7.56
Rear (Back Window)	7.20	6.22	4.78
Left Rear Quarter	6.40	5.67	5.67
Right Rear Quarter	7.10	5.44	5.00
Outside Rear View Mirrors	7.00	7.33	5.56
COMMUNICATIONS			
Dashboard Accessibility	8.27	6.60	6.13
Trunk Accessibility	7.07	7.00	7.93
Engine Compartment	8.44	7.44	6.44
TOTAL SCORES	147.98	192.10	172.24